

Ocean Literacy Survey, NCSU MEA 200H, December, 2006

Please respond to all questions. You will not be penalized for incorrect answers.

Name:

Educational Demographics:

Year: a) Freshman b) Sophomore c) Junior d) Senior

College (in NCSU):

- | | | |
|----------------------|----------------------|---------------------|
| a) CHASS | b) Ag & Life | c) PAMS |
| d) Management | e) Education | f) Engineering |
| g) Natural Resources | h) Design | i) Undecided or FYC |
| j) Textiles | k) Lifelong Learning | l) Other_____ |

What is the main reason you are taking this oceanography course?

- a) this particular course is required for my major
- b) this course fulfills general education requirement
- c) simple curiosity and/or personal interest
- d) other _____

Sources of Information:

Circle the two or three ways you have learned most about the ocean (before this class):

- a) formal education: a whole course in ocean science
- b) formal education: just touched on ocean science in other courses
- c) informal education: aquariums and museums
- d) informal education: a camp or the Ocean Science Bowl
- e) personal experience: actually going to the beach
- f) friends and family: in conversation
- g) media: TV, magazines, etc
- h) other: _____

If the media are an important source of information, please list a few examples below:

Circle the range of numbers that best represent the how many times each year you visit the beach or shore.

<1 1-3 4-10 10-20 20-50 >50

How many times each year do you visit an aquarium, zoo or museum where you might learn about the ocean?

<1 1-3 4-10 10-20 20-50 >50

Attitudes about the Ocean and Oceanography

Here are a number of statements that may or may not describe your beliefs about learning oceanography. You are asked to rate each statement by selecting a number between 1 and 5 where the numbers mean the following:

1. Strongly Disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly Agree

Choose one of the above five choices that best expresses your feeling about the statement. If you don't understand a statement, leave it blank. If you have no strong opinion, choose 3.

- ___ My actions can have a significant effect on the health of oceans and coastal areas.
- ___ I have a personal responsibility to work for the health of the oceans and coastal areas.
- ___ I am familiar with the environmental issues facing the coastal areas in my home state
- ___ I have enough background knowledge to write a substantive letter to my congressional representative about an issue affecting the ocean.
- ___ Man-made stresses are endangering coastal regions and the ocean's ability to sustain itself, and may well be leading to long-term damage and serious problems. (AAAS)

(Following statements are from the Colorado Learning Attitudes about Science Survey)

- ___ Knowledge in oceanography consists of many disconnected topics.
- ___ I find that reading the text in detail is a good way for me to learn oceanography.
- ___ I cannot learn oceanography if the teacher does not explain things well in class.
- ___ I study oceanography to learn knowledge that will be useful in my life outside of school.
- ___ Nearly everyone is capable of understanding oceanography if they work at it.
- ___ To understand oceanography I discuss it with friends and other students.
- ___ The subject of oceanography has little relation to what I experience in the real world.
- ___ To understand oceanography, I sometimes think about my personal experiences and relate them to the topic being analyzed.
- ___ When studying oceanography, I relate the important information to what I already know rather than just memorizing it the way it is presented.

Understanding the Ocean (multiple choice and short answer mixed together)

Size of the Ocean

- 1) How deep is the ocean, on average?
a) 100 yards b) 1 mile c) 500 meters d) 4000 meters
e) 20,000 leagues f) 6000 kilometers
- 2) What familiar size or distance is similar to the depth of the ocean?
- 3) The surface of a basketball has bumps and grooves that at their deepest may be about 1 mm deep. If the ocean were 1 mm deep, how big would the earth be?

a) size of a baseball (73 mm diameter)
b) size of the basketball (243 mm diameter)
c) could just fit under the hoop (3 m high)
d) as big as the stadium (250 m across)
- 4) How much of the Earth is covered with ocean?
- 5) What fraction of the total water on earth is in the ocean?
- 6) Is the draining of your kitchen sink significantly affected by the earth's rotation?
- 7) Why or why not?

Oceans and Life

- 8) Where is a greater diversity of living organisms found?
a) on land b) in the ocean c) both equally
- 9) What produces most of the earth's oxygen?
a) forests b) plants in the ocean c) both equally
- 10) What would the earth be like without an ocean?
- 11) Describe an oceanic environment you find interesting, and the ecosystem in that environment.

Coastal Processes

- 12) What is the essential nature of barrier islands?
a) stasis and stability b) motion and change
- 13) In general, what is the effect of human attempts to stabilize the shoreline?
a) increased erosion b) decreased erosion c) no effect

Oceans and You

- 14) How do scientists study the ocean?
- 15) What causes the **most** ocean pollution?
a) oil spills at sea b) litter from beaches c) runoff from land
- 16) List 2-5 ways your actions affect the ocean.
- 17) Discuss in more detail one way your actions affect the ocean.
- 18) What can you do to ensure that you're swimming in clean water at the beach?

Essay: Please type a 1-2 page essay to hand in with this survey.

1. What did you learn this semester? Detail about one topic is better than topic list.
2. Did anything you learned affect your attitudes toward ocean conservation?
3. Did you feel that your grade could be affected by your political beliefs?